

TIANJIN NORTH JINHENG CHEMICAL AND INDUSTRY PLANT

material safety data sheet

DLTDP

1. PRODUCT IDENTIFICATION

Trade Name: DLTDP

Formula: C₃₀H₅₉O₄S

Intended Use: Antioxidant

Health:	1
Flammability:	0
Reactivity:	0
Personal Protection:	N

HMIS RATING

Important Use Information:

This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin, body fluids, or abraded skin, or implantation within the human body, is specifically intended, unless the finished product has been tested in accordance with national and international applicable safety regulations. Because of the wide range of such potential uses, Ed-Lynn Network is not able to recommend this material as safe and effective for such uses and assumes no liability for such uses.

2. COMPOSITION & INFORMATION ON INGREDIENTS

O S H A	CAS No.	Chemical Identity	Exposure Limits				Carcinogen Status			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	123-28-4	Didocecy 3,3'-Thiopropionate ELC DLTDP >98 wt%	10 mg/m ³	Not Established	15 mg/m ³	Not Established	IEL 10 mg/m ³	Not Re-viewed	Not Re-viewed	Not Re-viewed
	Common Name Concentration									

* = OSHA Hazardous Ingredient

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3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance:

White to off-white crystalline powder

Flammability:

Use of proper grounding techniques are recommended when emptying this product from containers weight more than 1 pound. A build-up of Hazardous electrostatic charges may cause a flash fire or explosion when the contents are emptied into a flammable atmosphere. See Section 7.

Environmental:

This product is toxic to aquatic organisms. Avoid releasing into the environment.

Health:

This product presents little or no immediate hazard to people if spilled or released.

Disposal:

Sweep or shovel spilled material and place into a sealed container. Dispose in accordance with local, state and federal regulations. Incineration is recommended. This product is not a hazardous waste under RCRA.

Primary Route of Entry: Dermal, inhalation, ingestion

Eye: This product may cause slight eye irritation.

Skin: This product may cause skin irritation or sensitization. Avoid skin contact.

Swallowing: Small amounts, if swallowed, are not expected to cause injury; avoid swallowing.

Inhalation: This product is considered to present little risk if inhaled

Note: Refer to **Section 11, Toxicological Information** for details.

4. FIRST AID MEASURES

First Aid for Swallowing: If swallowed, give at least 3-4 glasses of water, but DO NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Seek medical attention immediately.

First Aid for Skin: Following skin contact, wipe away excess material with a dry towel. Then wash affected areas with plenty of water and soap, if available, for several minutes. Get medical attention if irritation occurs.

First Aid for Inhalation: If inhaled, remove from area to fresh air. Mechanical irritation is possible to mucous membranes and the respiratory tract. Get medical attention if respiratory irritation develops, or if breathing becomes difficult.

First Aid for Eye: Following eye contact, flush eyes with plenty of water for several minutes. Get medical attention.

Note to Physician: May aggravate pre-existing skin conditions, allergies and eczema. May cause heart effects based upon animal data. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point:	Not Available
Extinguishing Media:	Carbon dioxide, dry chemical, foam, water mist
Unusual Hazards:	The product can form an explosive dust/air mixture. Avoid dust formation and control ignition sources. Employ grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust and/or static electricity.
Fire Fighting Instructions:	Use self-contained breathing apparatus. Under fire conditions, toxic and irritating combustion products, such as carbon dioxide, carbon monoxide, sulfur oxides, etc. and fumes may be emitted.

6. ACCIDENTAL RELEASE MEASURES

Spill or Release Procedures:	Shut off all sources of ignition. Wear appropriate personal protective equipment and carefully sweep or vacuum up material and place in suitable labeled container for disposal.
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7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling and before eating, drinking, or using tobacco products. In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid contact with eyes and prolonged or repeated skin contact. Keep away from heat, sparks and flame. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. For industrial use ONLY.

Storage: Keep container tightly closed when not in use and during transport.

Explosion Hazards:

- *For All Packages:*

DANGER~ EXPLOSION RISK

- Risk of explosion if an air-dust mixture forms
- Avoid creating dusty conditions
- Empty only into grounded containers
- If container is larger than 550 US gallons (2m³) in volume, or when flammable solvents are present, the container must be inverted (with inert gas flush) or the system otherwise designed to prevent or contain an explosion-see expert advise.
- *In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liner, steel drums, steel pails or bulk bags, the following instructions apply:*
 - Always ground the package before emptying
- *For products that have external protective packaging, discharge product only from the primary product packaging, NOT from external containers or its liner.*

The user is responsible for designing a system that safely handles solid additives and to ensure proper training of employees in the system's use.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Work in well-ventilated areas. Use local exhaust to minimize dusting. Use mechanical ventilation for general area control.

General Protection: Wear coveralls.

Eye/Face Protection: Wear safety glasses or goggles if eye contact is possible.

Skin Protection: Wear gloves as a standard handling procedure.

Respiratory Protection: Use NIOSH-approved respirator suitable for respirable dusts, if TLV is exceeded. Consult the OSHA respiratory protection information located at 21 CFR 1910.134 and the American National Standard Institute's Practices of Respiratory Protection Z88.2.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: White to off-white crystalline powder

Boiling Point: Not Available

Evaporation Rate: Not Available

Freezing/Melting Point: 38-40°C [100-104°F]

Decomposition Temperature: Not Available

Specific Gravity @70°F: 0.985 [H₂O = 1]

Vapor Density: Not Applicable

% Volatile: Not Available

Vapor Pressure: 0.2mm Hg @ 163°C

Viscosity: Not Available

pH: Not Available

Solubility: < 0.01wt% in water at 20°C (68°F)

Ignition: Not Available

Water/oil Distribution: Not Available

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Incompatibility with other Materials: Strong oxidizing agents, strong acids, strong bases

Hazardous Decomposition Products: Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, sulfur oxides and other toxic compounds.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION:

The toxicological properties of this material have not been fully determined.

Acute Oral Toxicity: LD50 (Mouse) > 2,000 mg/kg
LD50 (Rat) >2,500 mg/kg

Acute Dermal Toxicity:	LD50 (Rabbits) > 10,000 mg/kg
Acute Inhalation Toxicity:	LC50 (Rats) > 13,000 ppm for a 4-hour dust exposure.
Acute Intra-peritoneal:	LC50 (Mouse) > 2,000 mg/kg
Eye Irritation:	(Rabbits) Mild irritant
Sensitization:	(Guinea pigs) Mild sensitizer (Humans) Mild sensitizer

.Mutagenicity / Teratogenicity / Reproductive Toxicity:

There is no evidence of adverse reproductive effects in rats, mice, rabbits and hamsters. There was no evidence of carcinogenicity in rats. The chemical did not produce chromosomal damage in rats or mice. A dominant lethal test in rats was negative. There was some indication of mutagenicity in bacteria.

Carcinogenicity: This product is not considered to be carcinogenic according to NTP, IARC, OSHA or ACGIH.

Other Toxicological Information:

In a 13 week oral gavage study in male and female rats at doses of 125, 350 and 1,000 mg/kg/day with a 4-week treatment-free period a NOAEL was determined to be 350 mg/kg/day. A NOEL was determined to be 125 mg/kg/day. At a dose level of 1,000 mg/kg/day pathological findings of the heart indicated ongoing myocarditis. This was reversible after 4 weeks without treatment.

Other acute and chronic health hazards, as well as target organs, are unknown. As with all dusts, inhalation of air concentration levels above PNOR may cause irritation and adverse lung effects.

12. ECOLOGICAL INFORMATION

Acute Toxicity to Fish:	96-hour LC50: 71mg/L
Acute Toxicity to Invertebrates:	Daphnia magna, 24-hour, EC50:10 mg/L
Acute Toxicity to Algae:	Green algae, 0-72 hour, EC50: 33.9 mg/L
Toxicity to Sewage Bacteria:	Not Determined
Biodegradability:	Not Determined

13. DISPOSAL CONSIDERATIONS

Disposal Considerations:	Dispose of waste at an approved chemical disposal facility in compliance with all current local, state/province, federal laws and regulations.
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14. TRANSPORT INFORMATION

This product is not regulated by any means of transport.

15. REGULATORY INFORMATION:**Chemical Weapons Convention (CWC):**

This product does not contain any chemicals listed under the Chemical Weapons Convention Schedule of Chemicals.

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US Federal Regulations:

Clean Air Act – Hazardous Air Pollutants (HAP):

This product contains no hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act.

Clear Air Act – Ozone Depleting Substances (ODS):

This product does NOT contain nor was manufactured with any Class I or Class II ozone depleting substances (ODS). This is based upon existing knowledge from our current supplier base.

Clean Water Act – Priority Pollutants (PP):

This product contains no chemicals listed under the U.S. Clean Water Act Priority Pollutant List.

Occupational Safety and Health Act (OSHA):

This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29CFR 1910.1200).

Its hazards are: Immediate (acute) health hazard, fire and the sudden release of pressure (explosion) hazard.

Resource Conservation and Recovery Act (RCRA):

This product is not considered to be a hazardous waste under RCRA (40 CFR 261).

SARA Title III: Section 302 – Extremely Hazardous Substances (EHS):

This product contains no chemicals regulated under Section 302 as extremely hazardous substances.

SARA Title III: Section 311/312 – Hazard Communication Standard (HCS):

This product is regulated under Section 311-312 (40 CFR 370).

SARA Title III: Section 313 Toxic Chemical List (TCL):

This product does not contain a toxic chemical for routine annual Toxic Chemical Release Reporting' under Section 313 (40 CFR 372).

TSCA Section 5(e) – Consent Order / SNUR:

This product is not subject to a section 5(e) Consent Order or Significant New Use Rule (SNUR).

TSCA Section 8(b) – Inventory Status:

All Chemical(s) comprising this product are listed on the TSCA inventory.

TSCA Section 12(b) – Export Notification:

This product does not contain any chemicals subject to Section 12(b) export notification.

Additional Federal Information:

This product does not contain any chemicals subject to Section 5(f)/6(a) rule.

International Regulations:

Australian Inventory Status:

This product contains only chemicals that are currently listed on the Australian Inventory of Chemical Substances.

Canadian Inventory Status:

This product contains only chemical that are currently listed on the Canadian Domestic Substance List.

European Inventory Status (EINECS):

This product contains only chemicals that are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

Korean Inventory Status:

This product contains only chemicals that are currently listed on the Korean Chemical Substances List.

Japanese Inventory Status:

This product contains only chemicals currently listed on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

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Additional International Information:

This product contains only chemical that are currently listed on the Philippine Inventory of Chemical Substances.

State Regulations:

California Proposition 65:

This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

Massachusetts Right-to-Know:

This product does not contain any chemicals that are subject to Massachusetts Right-to-Know disclosure requirement.

16. OTHER INFORMATION

Disclaimer:

The information and recommendations contained herein are based upon data believed to be correct. However, NO guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.

Information Contact: For technical information contact your technical sales representative. For additional health / safety / regulatory information, contact Product Safety at (330)773-2700.

Label Text: EC Labeling – None required